REMARKS

Upon entry of the above amendment, Claims 6-11, 13-17 and 25-30 will be pending in this application. Claims 6 and 11 have been amended. No new matter has been added. Claims 1-5, 12 and 18-24 have been canceled without prejudice or disclaimer.

Applicants have amended claims 6 and 11 solely to advance prosecution.

Applicants reserve the right to reassert any of the claims canceled herein or the original claim scope of any claim amended herein, in a continuing application.

Presently pending independent claim 6 has been amended to recite "a pharmaceutical composition comprising a fixed combination of active compounds consisting of the active compound ciclesonide or an epimer thereof and the active compound R,R-formoterol or a salt, or hydrate of a salt thereof, in an administration form suitable for inhalative administration by means of a powder inhaler, wherein the active compound ciclesonide or an epimer thereof and the active compound R,R-formoterol or a salt, or hydrate of a salt thereof, are the sole active ingredients in the composition and are present ready mixed in a fixed combination."

Support for claim 6 as amended can be found throughout the specification and the claims as originally filed. In particular, the limitation "the sole active ingredients in the composition" finds basis in the specification at page 5 of the specification in each of the three examples where the only active compounds present are limited to ciclesonide and R,R-formoterol. No other active compounds are present in the three example formulations. Therefore, there is basis in the specification to limit the active compounds in the presently claimed compositions to only these two active compounds.

Accordingly, the pharmaceutical composition of Claim 6 has been amended to be directed to only these two active compounds. Applicants respectfully point out, however, that the pharmaceutical composition of Claim 6 can contain additional elements such as excipients and/or vehicles in view of the transitional term "comprising" in Claim 6 which modifies the phrase "A pharmaceutical composition...". See also Claims 25-27 wherein additional excipients and/or vehicles are claimed. However, no additional active ingredients other than "ciclesonide or an epimer thereof and the active compound R,R-formoterol or a salt, or hydrate of a salt thereof" may be present in the presently claimed subject matter in view of the transitional phrase "consisting of" which modifies the phrase "...a fixed combination of active compounds...". This is further clarified by the currently amended claim language that these two active compounds "are the sole active ingredients in the composition and are present ready mixed in a fixed combination." Claims 7-10, 14-17 and 25-27 depend either directly or indirectly from Claim 6.

Presently pending independent claim 11 has been amended in a similar manner. Support for amended claim 11 can be found throughout the specification and the claims as originally filed. In particular, support can be found at page 5 of the present specification in three examples where the only active compounds present are limited to ciclesonide and R,R-formoterol. No other active compounds are present in the three example formulations. Therefore, there is basis in the specification to limit the active compounds in the presently claimed methods to only these two active compounds. Claims 13 and 28-30 depend, either directly or indirectly, from claim 11.

The Examiner will recognize that Claim 11 has been amended to be directed to a method of treating airway disorders comprising administering a pharmaceutical

composition comprising only these two active compounds. Applicants respectfully point out, however, that the pharmaceutical composition administered in Claim 11 can contain additional elements such as excipients and/or vehicles in view of the transitional term "comprising" in Claim 11 which modifies the phrase "a pharmaceutical composition...". See also Claims 28-30 wherein additional excipients and/or vehicles are claimed. However, no additional active ingredients other than "ciclesonide or an epimer thereof and the active compound R,R-formoterol or a salt, or hydrate of a salt thereof" may be present in the presently claimed subject matter in view of the transitional phrase "consisting of" which modifies the phrase "...a fixed combination of active compounds...". This is further clarified by the currently amended claim language that these two active compounds "are the sole active ingredients in the composition and are present ready mixed in a fixed combination."

The claim amendments should address the Examiner's concern on page 4 of the Official Action that "applicant would need to further recite in the claims that ciclesonide and formoterol are the only two active ingredients in the composition."

In view of the claim amendments as well as the remarks set forth below, further and favorable consideration is respectfully requested and an early allowance of this application is earnestly solicited.

I. At page 6 of the Official Action, claims 6-11, 13-17 and 25-30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Magee et al. (U.S. Patent Application Publication No. 2002/0111495) in view of Calatayud et al. (U.S. Patent No. 5,482,934).

The Examiner asserts that it would have been obvious to a person of ordinary skill in the art to incorporate the R-epimer of ciclesonide, as described in Calatayud et

al. into the composition comprising compounds of formula I, ciclesonide and formoterol, as described in Magee et al. to arrive at the presently claimed subject matter.

In view of the following, Applicants respectfully traverse this rejection.

To establish a prima facie case of obviousness, the PTO must satisfy three requirements. First, as the U.S. Supreme Court held in KSR International Co. v. Teleflex Inc. et al., 550 U. S. 398 (2007), "a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions. ...it [may] be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. ...it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does... because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." (KSR, 550 U.S. at 417). Second, the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. Amgen Inc. v. Chugai Pharm. Co., 18 USPQ2d 1016, 1023 (Fed. Cir. 1991). Lastly, the prior art references must teach or suggest all the limitations of the claims. In re Wilson, 165 USPQ 494, 496 (C.C.P.A. 1970).

It is submitted that a proper case of *prima facie* obviousness has not been established because, whether taken alone or together, none of the cited references teach or suggest all the limitations of the claims as required by *In re Wilson*. Further, a skilled artisan would never be motivated to modify the teachings of the cited references to arrive at the presently pending claims with any reasonable expectation of success as required by *Amgen Inc. v. Chugai Pharm Co.*

Independent claim 6 is directed to a pharmaceutical composition comprising a fixed combination of active compounds consisting of the active compound ciclesonide or an epimer thereof and the active compound R,R-formoterol or a salt, or hydrate of a salt thereof, in an administration form suitable for inhalative administration by means of a powder inhaler, wherein the active compound ciclesonide or an epimer thereof and the active compound R,R-formoterol or a salt, or hydrate of a salt thereof, are the sole active ingredients in the composition and are present ready mixed in a fixed combination.

Independent claim 11 is directed to a method of treating an airway disease in a patient comprising administering to a patient in need thereof a pharmaceutical composition comprising a fixed combination of active compounds consisting of a therapeutically effective amount of the active compound ciclesonide or an epimer thereof and the active compound R,R-formoterol or a salt or hydrate of a salt thereof, in an administration form suitable for inhalative administration by means of a powder inhaler, wherein the active compound ciclesonide or an epimer thereof and the active compound R,R-formoterol or a salt, or hydrate of a salt thereof, are the sole active ingredients in the composition and are present ready mixed in a fixed combination.

The Examiner will note that the pharmaceutical composition of Claim 6 and the method of Claim 11 have each been amended so that <u>no additional active ingredients</u> other than "the active ingredient ciclesonide or an epimer thereof and the active compound R,R-formoterol or a salt, or hydrate of a salt thereof" may be present in the presently claimed subject matter in view of the transitional phrase "consisting of" which modifies the phrase "...a fixed combination of active compounds...". This is further clarified by the currently amended claim language that these two active compounds "are the sole active ingredients in the composition and are present ready mixed in a fixed combination."

Applicants respectfully point out, however, that the pharmaceutical composition of Claim 6 can contain additional elements such as excipients and/or vehicles in view of the transitional term "comprising" in Claim 6 which modifies the phrase "A pharmaceutical composition...". See also Claims 25-27 wherein additional excipients and/or vehicles are claimed. Similarly, the method of Claim 11 encompasses a method of administering a pharmaceutical composition that may comprise additional elements such as excipients and/or vehicles in view of the transitional term "comprising" in Claim 11 which modifies the phrase "a pharmaceutical composition...". See also Claims 28-30 wherein additional excipients and/or vehicles are claimed.

In contrast, Magee et al. describe the use of a compound selected from a general class of PDE4 inhibitors used in combination with other therapeutic agents, which may be ciclesonide or formoterol. Accordingly, Magee et al. require the combination of a PDE4 inhibitor with an additional active agent such as ciclesonide or formoterol. The presently pending claims specifically exclude any other active ingredients other than

those recited in view of the use of the transitional phrase "consisting of" as it relates only to the active ingredients in the fixed combination as well as the clear recitation that the active ingredients in the fixed combination "are the sole active ingredients in the composition". Accordingly, Magee et al. does not "teach or suggest all the limitations of the claims" as required by *In re Wilson*.

Further, a skilled artisan would never be motivated to modify the teachings of the Magee et al. reference to arrive at the presently pending claims with any reasonable expectation of success as required by *Amgen Inc. v. Chugai Pharm Co.* Magee et al. require the presence of a PDE4 inhibitor. Ciclesonide and formoterol are only discussed by Magee et al. as two of many alternative "other therapeutic agents" on pages 98-99 that can be combined with the PDE4 inhibitory compounds. Thus, the ordinary skilled artisan would not be motivated by the teachings of the cited references to eliminate the presence of the PDE4 inhibitor and only include "other therapeutic agents" such as the presently claimed ciclesonide and R,R-formoterol compounds. Even further, nowhere does Magee et al. even describe the use of R,R-formoterol. As such, the Magee et al. reference does not render the presently pending claims obvious.

The Calatayud et al. reference does not remedy the deficient teachings of the Magee et al. reference. Calatayud et al. describes the synthesis of a general class of steroids that read on the structure of ciclesonide. Calatayud et al. also describes the purification of the mixture of epimers to obtain either of the epimers in a proportion of at least 99.9%. However, Calatayud et al. contains no suggestion or motivation that would lead a person of ordinary skill in the art to modify the Magee et al. reference to arrive at the presently claimed subject matter.

Accordingly, Applicants respectfully submit that a proper case of *prima facie* obviousness has not been established because, whether taken alone or together, none of the cited references teach or suggest all the limitations of the claims as required by *In re Wilson*.

As such, the Examiner has failed to demonstrate a *prima facie* case of obviousness against pending claims 6-11, 13-17 and 25-30. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

II. At page 10 of the Official Action, claims 6-11, 13-17 and 25-30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Keller et al. (U.S. Patent No. 6,645,466) in view of Magee et al. and in further view of Calatayud et al.

The Examiner asserts that Keller et al. describe dry powder formulations for inhalation containing a pharmaceutically effective carrier, pharmaceutically active compounds and magnesium stearate. The Examiner also asserts that it would have been obvious to one of ordinary skill in the art to substitute the R-epimer of ciclesonide as described in Calatayud et al. into the compositions of Keller et al., and to use the resultant compositions for the treatment of airway diseases as described in Magee et al. to arrive at the presently claimed subject matter.

Applicants respectfully traverse this rejection because a *prima facie* case of obviousness has not been established.

A brief outline of relevant authority is set forth above in Section I.

It is submitted that a proper case of *prima facie* obviousness has not been established because, whether taken alone or together, none of the cited references

teach or suggest all the limitations of the claims as required by *In re Wilson*. Further, a skilled artisan would never be motivated to modify the teachings of the cited references to arrive at the presently pending claims with any reasonable expectation of success as required by *Amgen Inc. v. Chugai Pharm Co*.

Independent claim 6 is directed to a pharmaceutical composition comprising a fixed combination of active compounds consisting of the active compound ciclesonide or an epimer thereof and the active compound R,R-formoterol or a salt, or hydrate of a salt thereof, in an administration form suitable for inhalative administration by means of a powder inhaler, wherein the active compound ciclesonide or an epimer thereof and the active compound R,R-formoterol or a salt, or hydrate of a salt thereof, are the sole active ingredients in the composition and are present ready mixed in a fixed combination.

Independent claim 11 is directed to a method of treating an airway disease in a patient comprising administering to a patient in need thereof a pharmaceutical composition comprising a fixed combination of active compounds consisting of a therapeutically effective amount of the active compound ciclesonide or an epimer thereof and the active compound R,R-formoterol or a salt or hydrate of a salt thereof, in an administration form suitable for inhalative administration by means of a powder inhaler, wherein the active compound ciclesonide or an epimer thereof and the active compound R,R-formoterol or a salt, or hydrate of a salt thereof, are the sole active ingredients in the composition and are present ready mixed in a fixed combination.

As discussed above in Section I, none of Magee et al. and Calatayud et al., whether taken alone or in combination, teach or suggest all the limitations of the claims as required by *In re Wilson*.

Keller et al. do not remedy the deficiencies of Magee et al. and Calatayud et al. Keller et al. is directed to dry powder formulations for inhalation which contain a pharmaceutically ineffective carrier of non-inhalable particle size and a finely divided pharmaceutically active compound of inhalable particle size. See Keller et al. at the Abstract. According to Keller et al., magnesium stearate is used in the dry powder formulations. *Id.*

However, like Magee et al. and Calatayud et al., Keller et al. do not teach or suggest a pharmaceutical composition comprising a fixed combination of active compounds consisting of the active compound ciclesonide or an epimer thereof and the active compound R,R-formoterol or a salt, or hydrate of a salt thereof, in an administration form suitable for inhalative administration by means of a powder inhaler, wherein the active compound ciclesonide or an epimer thereof and the active compound R,R-formoterol or a salt, or hydrate of a salt thereof, are the sole active ingredients in the composition and are present ready mixed in a fixed combination.

Further, nothing in Keller et al., Magee et al. and Calatayud et al. describe the use of the very specific R,R-formoterol compound recited in the presently pending claims.

As such, none of Keller et al., Magee et al. and Calatayud et al. describe a "pharmaceutical composition comprising a fixed combination of active compounds consisting of the active compound ciclesonide... and R,R-formoterol..." which are the

sole active ingredients in the composition and are present ready mixed in a fixed combination, as presently claimed.

Further, because there is no teaching of the presently claimed very specific R,R-formoterol compound contained in the cited Keller reference, the ordinary skilled artisan would not be motivated to select this specific epimer with any reasonable expectation of success.

Accordingly, Applicants respectfully submit that a proper case of *prima facie* obviousness has not been established because, whether taken alone or together, none of the cited references teach or suggest all the limitations of the claims as required by *In re Wilson*.

As such, the Examiner has failed to demonstrate a *prima facie* case of obviousness against pending claims 6-11, 13-17 and 25-30. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

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CONCLUSION

The Examiner is invited to contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

In the event this paper is not timely filed, Applicants petition for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 14-0112.

Respectfully submitted,

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